

CLAIMS

1. A method for reporting events stored in an event log within an electronic device, the method comprising:

receiving a request for a report of events of a specified type from a specified requestor;

searching for a watermark event related to the specified event type and specified requestor;

when a related watermark event is found, using a value stored within the watermark to select an event at which to begin searching the event log for events of the specified type to report to the specified requestor;

when a related watermark event is not found, selecting a default event at which to begin searching the event log for events of the specified type to report to the specified requestor; and

searching the event log starting at the selected event to find and report events of the specified type.

2. The method of claim 1 wherein searching for a watermark event related to the specified event type and specified requestor further includes:

selecting an event most recently logged in the event log as a first event;

starting with the selected first event and preceding sequentially towards the least recently logged event, sequentially selecting each event as a candidate event;

when the selected candidate event is a watermark event with an event type field containing an indication of the specified event type and a requestor field containing an indication of the specified requestor, returning the selected candidate watermark event as a positive search result; and

when the least recently logged event has been selected, and is not a watermark event with an event type field containing an indication of the specified event type and a requestor field containing an indication of the specified requestor, returning a negative search result.

3. The method of claim 1 wherein the value stored within the watermark used to select an event at which to begin searching the event log for events of the specified type to report to the specified requestor is a relative offset from the watermark to the selected event at which to begin searching the event log.
4. The method of claim 1 wherein the value stored within the watermark used to select an event at which to begin searching the event log for events of the specified type to report to the specified requestor is an offset from a logged event within the event log to the selected event at which to begin searching the event log.
5. The method of claim 1 wherein the value stored within the watermark used to select an event at which to begin searching the event log for events of the specified type to report to the specified requestor is an address of the selected event.
6. The method of claim 1 wherein the default event at which to begin searching the event log for events is the first event in the event log.
7. The method of claim 1 wherein searching the event log at the selected event to find and report events of the specified type further includes examining each event in the event log, starting at the selected event, until either a specified number of events of the specified type are found or until all events in the event log between and including the selected event and a final event have been examined.
8. The method of claim 7 wherein the final event is most recently logged event in the event log.
9. The method of claim 7 wherein the final event is the least recently logged event in the event log.
10. The method of claim 1 wherein, following searching the event log starting at the selected event to find and report events of the specified type, a new watermark event

including indications of the specified event type and specified requestor is inserted into the event log.

11. The method of claim 10 wherein the new watermark includes a relative offset to a next event in the event log following a last event reported.

12. The method of claim 10 wherein the new watermark includes a relative offset to a next position in the event log following the new watermark.

13. The method of claim 10 wherein the new watermark includes a relative offset of 0.

14. An event reporting system within an electronic device, the event reporting system comprising:

a non-volatile memory component;

an event log stored within the memory component that sequentially stores events; and

event reporting logic that stores a watermark event to note the extent of a first search for events to report to a specified event report requestor and that subsequently accesses the stored watermark event to identify a location within the event log to begin a second search for events to report to the specified event report requestor.

15. The event reporting system of claim 14 wherein the non-volatile memory component is selected from among a flash memory and an electronic erasable programmable read-only memory.

16. The event reporting system of claim 14 wherein the event log is a table of entries, each entry representing a single logged event and containing a field that identifies the type of event represented by the entry.

17. The event reporting system of claim 14 wherein a watermark event entry includes fields identifying the event represented by the entry as a watermark event and additional fields

indicating a type of event to which the watermark is directed and an identifier of an event report requestor associated with the watermark.

18. The event reporting system of claim 14 wherein a watermark event includes a field containing a relative offset from the watermark entry to the location within the event log to begin a second search for events to report.

19. The event reporting system of claim 14 wherein a watermark event includes a field containing an absolute offset from an entry in the event log to the location within the event log to begin a second search for events to report.

20. The event reporting system of claim 14 wherein a watermark event includes a field containing an address of the location within the event log to begin a second search for events to report.